## RECOVERY PROGRAM DIRECTOR'S UPDATE September 2001

<u>Population Status</u>: Little change in population status. Numbers reflect the best available point estimates of the mean number of adults.

|   | RIVER  |   |  |  |
|---|--|---|--|--|
| SPECIES   | MIDDLE GREEN <sup>1</sup>  | LOWER GREEN <sup>2</sup>                            | COLORADO   |  |
| Colorado pikeminnow   | Stable/increasing. $\approx 3,500^3$                                   | Stable  | Stable. ≈650 <sup>4</sup>  |  |
| Humpback chub   | Yampa Canyon:<br>Stable/small. ≈600                                    | Desolation/Gray<br>Canyon: Stable?/small.<br>≈1,500 | Black Rocks Canyon: Stable. ≈1,000 <sup>5</sup> Westwater Canyon: Stable/doing well. ≈4,500 Cataract Canyon: Stable?/small. ≈500 |  |
| Razorback sucker (All populations are currently being augmented through | <500 adults, very<br>limited recruitment;<br>stocked fish returning to | Few adults, very limited recruitment                | Few adults,<br>no recruitment  |  |

Populations are currently being re-introduced in Colorado, lower Green, middle

stocking)

Bonytail

spawning bar

Green and Yampa rivers.

#### I. Instream Flow Identification and Protection

Goal: To protect sufficient instream flows to support self-sustaining populations of the endangered fishes.

Status: • The FWS continues to work with WAPA, CREDA, Water Users, and Colorado to address minority concerns regarding flow recommendations for the Colorado and Gunnison rivers. Their representatives met with the FWS twice in April to discuss technical aspects of the flow recommendations and develop an approach to address non-technical issues. The FWS submitted a written response to the minority in July and the minority replied in August.

Middle Green River consists of the Yampa River to approximately 30 miles SSW of Ouray, Utah.

<sup>&</sup>lt;sup>2</sup> Lower Green River is from the end of the Middle Green River section to the confluence of the Colorado River.

<sup>&</sup>lt;sup>3</sup> Preliminary estimate presented at Researcher's Meeting.

<sup>&</sup>lt;sup>4</sup>Changed based on most recent population estimate from Osmundson.

<sup>&</sup>lt;sup>5</sup>Changed based on personal communication from McAda.

While there still are several significant unresolved issues, the FWS believes they can be resolved in a timely manner. However, program participants who approved the flow recommendations as drafted are concerned that the FWS will go too far to accommodate the minority. The FWS agreed to open discussions to all interested program participants.

- The USBR completed a draft water demand analysis for the Gunnison River in May. However, its initial demand projections were questioned by Gunnison Basin water users. Subsequently, Arapahoe County also requested that the entire available yield of the Aspinall Unit (240,000 acre-feet) be put on the table for the purposes of a PBO consultation. Given this, and the uncertain timeline for a negotiated settlement of the NPS' Black Canyon water rights, the Gunnison PBO workgroup agreed to defer further work on a management plan until there is greater clarity as to the resolution of these issues.
- Reclamation recently completed 06/19/01 work on the Green Mountain Municipal Recreation contract to allow surplus water from the Green Mountain Historic Users Pool (HUP) to be released and protected under Colorado Water Law. The cities of Grand Junction, Palisade, and Fruita are parties to the contract. The contract is a 5-year renewable contract which is dependent on the amount of water available. Water availability will be determined by the HUP management agencies using the surplus criteria instituted in the Orchard Mesa check case. Water made available by the agreement was utilized in July to help maintain FWS flow targets for the 15-Mile Reach.
- No Coordinated Reservoirs activities were initiated in 2001 because flows did not reach the desired 12,900 cfs threshold at Cameo. The HUP management agencies began weekly conference calls in early July and have been assessing the flows at Cameo and Palisade. Beginning in mid-July, water was released from Green Mountain, Ruedi, Wolford and Williams Fork reservoirs to meet a dry year target of 850 cfs. Recently, because of increased rainfall in the basin, the flow target has been increased to 1240 cfs and reservoir flows are being managed to maintain the target.
- The Coordinated Facilities Operations Project (CFOPS) was initiated in 1999 to investigate alternatives for supplying up to an additional average annual 20,000 acre-feet of water to the 15-Mile Reach of the Colorado River. The additional water will be supplied to supplement spring peak flows by about 1,000 cfs over a 10-day period. A secondary purpose is to augment flows during the late summer and fall period. Phase I of this project examined a wide range of possible alternatives that were subjected to a preliminary screening process to

arrive at a short list of alternatives that would be intensively studied in Phase II. The final report on Phase I was completed in September 2000. Phase II modeling is underway and Phase II is expected to be completed by September 30, 2001. Six technical memoranda have been completed and submitted to the CFOPS Elective Committee for Review. One meeting of the CFOPS technical committee was held on March 14 to review four technical memoranda. Modeling of alternatives related to the Colorado-Big Thompson (CBT) Project is being postponed pending responses from USBR and Colorado to the Colorado River Water Conservation District regarding CBT operations. With September rapidly approaching, it is unlikely the CBT issues can be addressed before the end of 2001.

- The Management Committee approved a motion to allow \$300,000 to be paid to Colorado from Recovery Program funds for water storage in Highline Lake. This will allow the USBR to construct a pumping plant at Highline Lake as part of the Grand Valley Water Management Project. This transaction, however, is contingent upon the transfer of Highline Lake from CDOW to CDPOR.
- A review draft of the Yampa River Management Plan was completed in March and posted on the Recovery Program website. However, several members of the Yampa PBO workgroup requested additional revisions to the plan prior to distribution to a wider audience. Revisions are expected to be completed by the end of September at which time the plan will be distributed for public review and comment. In addition, the FWS will prepare an environmental assessment (EA) and a biological assessment (BA) on the plan. The BA will accompany a request to initiate the formal intra-Service Section 7 consultation process that will result in a PBO for the Yampa Basin. Public meetings will be scheduled in October (tentative) to solicit scoping input for an EA. A final plan, BA and draft EA are expected by the end of March 2002, with a final PBO by the end of September 2002.
- The CDPOR agreed to extend the Steamboat Lake lease through November 2001 while negotiations between the Recovery Program and CDPOR continue. The purpose of these negotiations is for the Program to acquire a long-term lease for augmentation water from Steamboat Lake. The long-term lease is expected to cost more per acre-foot than the current lease, but the Program would pay only for the water it needs,

rather than the current "take-or-pay" arrangement. The lease extension will allow for water to be released to augment low flows in the Yampa River this summer and fall.

- From 1988 through June 30, 2001, the Service consulted on 140 projects with a potential to deplete a total of 1,673,146 acre-feet (af) of water in the Upper Colorado River Basin, of which 1,450,589 are historic depletions. Three of these "projects" are blanket consultations for depletions under 100 af, up to 6,000 af total. These consultations have covered 382 actual projects depleting a total of 5,610 af (4,014 af in Colorado, 1000 af in Utah, and 596 af in Wyoming). Another of these 140 "projects" is the 15-Mile Reach programmatic biological opinion which covers an average depletion of 1 million af per year of existing depletions (through September 30, 1995) and up to 120,000 af of new depletions (since September 30, 1995) in the Colorado River above the confluence with the Gunnison River. Thus far, the 15-Mile Reach PBO has covered 108 actual projects. In total, since January 1988, the Service has consulted on 627 actual projects depleting water from the Upper Colorado River Basin.
- The FWS continues to waive charges for water projects that deplete fewer than 100 acre-feet of water per year. This arrangement has simplified the section 7 consultation process for many water projects in the upper basin. During its 2001 sufficient progress review, the FWS proposed to increase the depletion ceiling from 3,000 to 4,500 acre-feet per project.

#### II. Habitat Restoration

Goal: To provide or enhance habitat for the rare fishes through habitat development or management measures such as:

- fish passageways
- screens to prevent fish entrainment into diversion canals
- restoration of flooded bottomland habitats.

Status: • The fish ladder at the Redlands Diversion Dam on the Gunnison River has been operational since June 1996. The ladder has been used primarily by native fishes (more than 40,000), including 52 Colorado pikeminnow and two previously-stocked razorback suckers. Six of the pikeminnow have used the ladder twice; one has used it three times. Native fishes that were marked and released above the dam dispersed upstream, some as far as 57 river miles to the base of the Hartland Diversion Dam. A fish screen will be installed at Redlands by April 2003, if deemed necessary, to prevent entrainment of endangered fishes into the diversion canal.

• A fish passage structure was constructed at the Grand Valley Irrigation Company Diversion Dam on the Colorado River in January 1998. Ten adult Colorado pikeminnow were captured above the GVIC dam between August 19 and September 24, 1998. Providing fish passage at this structure, Price-Stubb, and the Grand Valley Project Diversion Dam

will restore 55 miles of historically-occupied habitat for endangered fishes. Design options for a canal fish screen are being developed; construction is scheduled for completion by March 2002.

- Design options are being developed to restore fish passage at the Price-Stubb Diversion Dam. Construction was tentatively scheduled to begin in the fall of 1998. However, complex issues (e.g., potential effects of passage restoration on railroad, highway, Reclamation's siphon, and Ute pumping; ownership of property and FERC license) have caused delays. The schedule for construction is pending a decision by FERC on the amendment to the hydropower license. Construction is tentatively scheduled for 2003-2004. A fish screen will not be necessary because water has not been diverted at this site since 1919.
- Pre-construction activities are ongoing through FY 2002 to restore fish passage at the Grand Valley Project Diversion Dam. Construction is scheduled for 2002-2003. Installation of a fish screen is scheduled for completion by February 2004.
- Design options have been developed for a fish screen at the Tusher Wash Diversion canal on the Green River in Utah. Construction is tentatively scheduled for completion by September 2003. Reclamation is negotiating with the Green River Canal Company and Thayne Hydropower.
- Restoration of passage and installation of a fish screen at the Hartland Diversion Dam on the Gunnison River is on hold pending reassessment of the need for passage this far up the Gunnison River and assessment of the feasibility of warming releases from the Aspinall Unit (being conducted in 2001).
- Floodplain habitat has been restored at five Bureau of Land Management sites on the Green River, three sites at Ouray National Wildlife Refuge, two sites on the Colorado River near Grand Junction, and the Escalante State Wildlife Area on the Gunnison River. The Program has acquired 1,200 acres of floodplain/wetland habitat along the Green, Colorado, and Gunnison rivers. A quarterly update on land acquisition is expected by the end of September 2001.
- A draft final report which evaluates the success of levee-removal efforts is expected to go to the Biology Committee by September 30, 2001.

### III. Nonnative Fishes and Sportfishing

Goal: Minimize the impacts of nonnative fishes and incidental take associated with sport fishing on the endangered fishes.

- Through 2000, the Utah Division of Wildlife Resources, Colorado Division of Wildlife, and the Service have removed more than 24,900 nonnative channel catfish, 23,889 nonnative sunfish and bass, and 319,500 nonnative minnows from rivers in the upper Colorado River basin. Nonnatives removed during 2001 have yet to be tallied. A workshop is tentatively scheduled for February 2002 to discuss and evaluate the effects of nonnative fish removal efforts on native and endangered fish populations.
  - The project to remove adult northern pike from the Yampa River and translocate these fish to off-channel sites in compliance with the 1996 Nonnative Fish Stocking Procedures (NNFSP) was initiated in 1999. After a late start due to delays in identifying appropriate receiving waters and in obtaining collecting permits, 164 northern pike were collected. Of those, 80 were translocated to ponds at the Yampa State Wildlife Area, and 72 were returned alive to the Yampa River (returned alive because at time of capture no appropriate receiving waters had been identified). Response of local anglers fishing the translocation ponds was positive. In 2000, about 350 northern pike were translocated to Rio Blanco Lake (in-basin sites that meet the criteria of the NNFSP agreement were unavailable). During 2001, approximately 500 northern pike ( $\sim$ 50% from critical habitat and  $\sim$ 50% from upstream) were removed from the Yampa. Of those, 230 were translocated to the Yampa State Wildlife Area. All northern pike removed from critical habitat were released into Rio Blanco Lake. Based on the amount of effort expended for the number of northern pike captured within critical habitat, it appears that there may have been a depletive effect from northern pike removal efforts.
  - Approximately 250 northern pike have been removed from the Green River so far during 2001.
  - Removal and control of nonnative fishes in Colorado and Gunnison River floodplain source ponds began in 1998. As of August 2001, 127 ponds have been surveyed. Of those, 32 have been chemically reclaimed, 1 reduced in depth to allow for winterkill, 5 managed annually through filling and drying, 1 pond outlet screen installed, and vegetation control to induce summer kill occurred in 2 ponds. An objective of the project is to reclaim/control water levels/reshape/isolate 150 floodplain ponds of the Colorado and Gunnison rivers through 2003.
  - A fish barrier net was installed on August 18, 1999, in Highline Lake Reservoir to reduce or eliminate escapement of nonnative sportfishes from the reservoir and into reaches of critical habitat in the Colorado River. Evaluation of the operation, maintenance, and effectiveness of this fish barrier net suggests that it has significantly reduced escapement

of nonnative fishes from the reservoir. While largemouth bass in the lake doubled from 1999 to 2000, the number of bass captured below the lake fell by almost 50 percent. This effort has allowed active management of Highline Reservoir to provide warmwater fishing opportunities. Similar devices to control escapement of nonnative fishes from reservoirs are being considered for Elkhead Reservoir, Bottle Hollow Reservoir, and possibly other reservoirs.

### IV. Propagation Activities

Goal: • Produce a sufficient supply of hatchery reared fish to support research and recovery activities.

• Conserve the genetic diversity present in the wild.

Status: • The table on the following page identifies the species stocked from March 2000 through August 2001.

- In 2000, 19 adult razorback suckers were collected from the spawning bar in the middle Green River. Of these, 8 were wild fish (2 females and 6 males) and 11 were hatchery fish (2 females and 9 males; one of these fish had been stocked into a restored Green River floodplain site).
- The 25 lots of paired matings have been completed by using razorback sucker from the Grand Valley.
- This past fall, more than 21,000 bonytail were stocked in the Colorado River and more than 48,000 were stocked in the Green River.
- The Program is revising State stocking plans to stock larger but fewer fish. This should result in fewer facility needs, i.e., less grow out ponds.
- The Program stocked 30,000 young razorback in a Colorado Department of Transportation pond located near the upper end of DeBeque Canyon.
- The J.W. Mumma Native Aquatic Species Restoration Facility (CDOW) is currently raising 25,000 bonytail and 35,000 razorback sucker for the Program.

<u>Stocking Status</u>: Below are the numbers and sizes stocked into various river reaches for the Upper Colorado River Endangered Fishes Recovery Program, from March 2000 to August 2001. (Bold information is new since the last Program Director's Update, March 2001)

| Species  | Date     | River Section | Number | Approximate Size (inches) |
|----------|----------|---------------|--------|---------------------------|
| Bonytail | Mar 2000 | Lower Green   | 13     |                           |

|                        | Apr 2000        | Lower Green               | 19,987        | 4-7           |
|------------------------|-----------------|---------------------------|---------------|---------------|
|                        | Apr 2000        | Colorado                  | 15,037        | 3             |
|                        | Jul 2000        | Yampa                     | 5,000         | 4             |
|                        | Jul 2000        | Middle Green <sup>1</sup> | 5,000         | 4             |
|                        | Oct/Nov 2000    | Colorado                  | 21,237        | 4-7           |
|                        | Oct/Nov 2000    | Green                     | 48,205        | 3-4           |
|                        | April 2001      | Colorado                  | 27,968        | 4-7           |
|                        | April 2001      | Green                     | 35,000        | 4-7           |
| Razorback sucker       | Jun 2000        | Old Charlie               | 9599          | <1            |
|                        | Jun 2000        | Middle Green              | 79            | 17            |
|                        | Jun 2000        | Stewart Lake              | 145           | 12            |
|                        | Jun 2000        | Old Charlie               | 2,106         | >6            |
|                        | Spring 2001     | Riverside Ponds           | 916<br>66,110 | 167-379<br>10 |
|                        | Apr 2000        | Colorado <sup>3</sup>     | 7,147         | 4-6           |
|                        | Aug 2000        | Colorado <sup>3</sup>     | 3,875         | 4-13          |
|                        | Aug 2000        | Gunnison                  | 1,640         | 3-13          |
|                        | April/July 2001 | Colorado                  | 97            | 10            |
|                        | April/July 2001 | Gunnison                  | 154           | 20+           |
| Colorado<br>pikeminnow | Jun 2000        | Colorado                  | $60^4$        | 17-22         |

This reach of the middle Green River was in the Lodore Canyon.

These smaller fish were stocked in depression wetlands where early life stages can take advantage of resources for growth and protection.

Colorado River at Parachute, CO.

These fish are 1991 year class from Horsethief ponds and are part of the translocation study

### V. Research, Monitoring, and Data Management

Goal: To support recovery activity, monitor endangered fish status and trends, and maintain Recovery Program data archives.

Status: • In FY 2001, the Program is developing population estimates for Colorado pikeminnow in the Colorado River and the middle and lower Green River; and humpback chub in Yampa, Black Rocks and Desolation/Gray Canyon.

Colorado pikeminnow in the Colorado River in Colorado may be nearing carrying capacity (emphasizing the importance of restoring fish access to the reach above Price-Stubb and the Grand Valley Project).

- A population estimate for Colorado pikeminnow was initiated this spring for the lower Green River stock. More than 500 Colorado pikeminnow were caught and tagged. In addition about 40 razorback sucker, 35 humpback chub and 1 bonytail were caught on a pass through Desolation/Gray Canyons.
- A preliminary population estimate of greater than 3,500 Colorado pikeminnow was reported for the middle Green River.

# VI. <u>Public Involvement</u>, Information, and Education

Goal: To promote public understanding, appreciation, and support for efforts to recover the endangered fish.

Status: The Information and Education Committee met April 20 in Grand Junction and June 27 in Denver. Committee members remain active, helping the Program achieve its I&E goals. In the absence of a representative for environmental organizations, appropriate Management Committee members are informed of all I & E activities. The Committee is in the process of recruiting new members to represent CDOW, The Nature Conservancy, CREDA and WAPA. Chris Treese agreed to remain Chairman for another year. The next meeting will be held October 10 in Denver.

#### Key I & E efforts include:

• News Media: The Recovery Program's visibility through the news media remains high. Key stories from March through August included coverage of the mechanical failure at 24 Road Hatchery; draft recovery goals; bonytail reintroduction in the Colorado and Green rivers; growout ponds; nonnative fish removal in the Yampa River, reservoir storage/water agreements for low-water years; proposed expansion of Elkhead Reservoir; razorback sucker use of the Redlands fish ladder; and using a consensus approach to recover endangered species. News

clips are faxed routinely to the I&E Committee, interested Management Committee members, and anyone else upon request.

- The Recovery Program newsletter is slated for completion in October.
- The Recovery Program exhibited at the Colorado Water Workshop in Gunnison in July. About 250 people attended and 25 signed up to receive the newsletter. The Program will exhibit at the Wyoming Water Association's annual meeting in October.
- The Utah Division of Wildlife Resources will feature razorback sucker and bonytail in a live exhibit of endangered fish at the Utah State Fair, Sept. 6-16. Attendance is estimated at 200,000.
- Grand Junction's Museum of Western Colorado featured the Recovery Program's exhibit from early July through mid-September. About 60,000 people toured the museum.
- An extensive outreach plan was developed and is being implemented in support of the draft recovery goals. The plan addresses congressionals and news media in seven states: Colorado, Utah, Wyoming, Nevada, New Mexico, Arizona and southern California.
- Interpretive Exhibits: The Recovery Program is making progress toward developing and placing interpretive signs in key areas where recovery efforts are ongoing. In Grand Junction, collaborative efforts with local government and private organizations are underway to landscape and place interpretive signs at the Confluence Habitat Restoration Area (the former Jarvis site.) Earth Day 2002, is being slated as a work day to involve community volunteers, such as the Girl Scouts and Boy Scouts to help with landscape work.

A broader plan is in place with some of the same local organizations to develop signs on endangered fish and other topics along the entire Colorado Riverfront Trail. The National Park Service helped write a grant proposal to fund a master interpretive plan for this project. A decision on the grant award is expected in September.

The Recovery Program is working closely with The Nature Conservancy's Carpenter Ranch in Hayden on several educational and outreach activities in the Yampa River Basin. These include placing an aquarium with endangered fish at the Ranch; hosting teachers' workshops; distributing the Historical Accounts publication to local libraries and museums and identifying highly visible locations to place the Recovery Program's exhibit.

Interpretive signs for hatcheries are being made and should be ready for installation by November.

Contacts have been made to identify additional interpretive opportunities with other entities such as the Vernal Field House Museum and the Lake Powell Visitors' Center.

# VII. Program Management

Goal: To ensure effective implementation and coordination of the Recovery Program.

Status: • Extending the Recovery Program - According to the funding legislation, by January 21, 2002, Program participants must extend the Program's Cooperative Agreement (which currently goes through 2003). Although final action on extension is conditioned upon Program concurrence with the recovery goals, Program participants are working out details to amend the Cooperative Agreement to extend the Program.

• The Program's electronic listserver has more than 150 subscribers and is one of two key components of the Program's electronic communication (with about 13 messages posted per week). All Program participants are strongly urged to subscribe. The Program participants' web site (http://www.r6.fws.gov/crrip/) has detailed Program information such as upcoming meeting dates and times; meeting agendas and summaries; a bibliography of the Program library; the RIPRAP; and numerous other Program documents. The site is regularly updated and expanded.